# 12<sup>th</sup> Grade Assignment – Week #7

# **Group Assignments**:

## For Tuesday

- Do the following problems in the given order. See how far you can get!
  - Do *Discovery Sheet #6*, problems #1 and #2. Only spend a maximum of 20 minutes on this!
  - Do *Discovery Sheet #7*, problem #1a and #1b. But first, make sure everyone understands the *Definition of the Derivative* (located above problem #1a).
  - If you still have time, try this problem: Use the definition of the derivative to find the derivative, f'(x), of  $f(x) = 3x^5$

#### For Thursday

- Do the following problems in the given order. See how far you can get!
  - Use the definition of the derivative to find the derivative, f'(x), of  $f(x) = 7x^2$
  - Do *Discovery Sheet #7*, problems #2 and #3. This is a shortcut for finding the derivative of any polynomial function.
  - Do *Discovery Sheet #6*, problem #4.
  - Do *Discovery Sheet #6*, problems #3a and #3b. Problem #3c is optional.

### Individual Work

- As much as you can, complete any of the group assignment that your group didn't finish.
- Create a "summary page" for the week.